Appln. No. 10/724,359 Amd. dated January 11, 2006 Reply to Office Action of July 11, 2005

REMARKS

The Official Action of July 11, 2005, and the prior art cited and relied upon therein have been carefully reviewed. The claims in the application remain as claims 1-21, including those which have been withdrawn from consideration. Applicants respectfully submit that the claims define novel and unobvious subject matter and should be allowed. Accordingly, applicants respectfully request favorable reconsideration and allowance.

The election of species requirement has been repeated and made final whereby claims 1, 2, 7, 9, 11, 14, 16, 18 and 20 have been withdrawn from further consideration.

Applicants respectfully note that the species are not so different from one another, even if they are patentably distinct. The Examiner has the discretion of examining in one application plural species even if the requirement is deemed correct, and applicants respectfully request the Examiner to exercise such discretion and examine the non-elected claims along with the elected claims. Applicants believe that it would not constitute a serious burden to do so, and in this regard applicants respectfully note the second paragraph of MPEP 803.

Applicants do not understand the Examiner's commentary in paragraph 2 at the middle of numbered page 2 of the Office Action. What related applications are being referred to? Undersigned is not aware of any related (e.g. parent) applications.

Claims 17, 19 and 21 have been neither withdrawn nor rejected. Accordingly, applicants understand that these claims are deemed by the PTO to define patentable subject matter, including novel and unobvious subject matter under Sections 102 and 103. Applicants are proceeding in reliance thereof, and applicants also respectfully reserve the right to redraft these claims in independent, original form.

Applicants have claimed priority from two (2) applications filed in Japan on November 29, 2002, and applicants have filed certified copies of these priority documents. Accordingly, acknowledgement by the PTO of the receipt of applicants' papers filed under Section 119 would be appreciated.

Claims 3-6, 8, 10, 12, 13 and 15 have been rejected under the second paragraph of Section 112. The rejection is respectfully traversed.

First, the main objection appears to be that the "claims are generally narrative and indefinite, failing to

conform with current U.S. practice." There is nothing wrong with claims in generally narrative form, and the PTO has not pointed out what it considers to be indefinite. The rejection also states that the claims are "replete with grammatical and idiomatic errors", but again these have not been pointed out, and are not seen by the applicants.

The invention as called for in claim 3 (hereinafter, "claimed invention") provides a method of making a polarizable electrode for an electric double layer capacitor, comprising:

a mixing step including a primary mixing in which a carbonaceous powder and a conductive assistant are mixed into a primary mixture and a secondary mixing in which a binder and a binder assistant are added to the primary mixture to be mixed into a material mixture;

a kneading step in which the material mixture is kneaded until becoming viscous and then massive due to viscosity, thereby being formed into a forming material;

a forming step in which the massive forming material is formed into a number of grains of forming material and thereafter into a sheet of forming material; and

a rolling step in which the sheet of forming material is rolled into a thinner sheet shape.

Applicants' claims clearly recite a kneading step in which the material mixture is kneaded; such kneading results

in the mixture becoming viscous and then massive due to viscosity, thereby being formed into a forming material. Furthermore, the claims also clearly recite a forming step in which the massive forming material is formed into a number a grains of forming material and thereafter into a sheet of forming material. Additionally, the claims recite a rolling step in which the sheet of forming material is rolled into a thinner sheet shape.

Respectfully, applicants believe the claims as previously and originally drafted, particularly when considered in light of applicants' specification (fully consistent with the law), would not have been confusing to those skilled in the art, and therefore the claims in their previous form are fully in accordance with Section 112. At worst, the claims in their previous form might be considered objectionable, but only as to form, requiring no substantial amendments relating to patentability.

Nevertheless, in deference to the Examiner's views and to minimize needless argumentation, a number of cosmetic amendments have been made in the claims. Such amendments are of a formal nature only, i.e. made to place the claims in improved form for U.S. practice or the Examiner's understanding of what is necessary or desirable for U.S. practice. Such amendments are not "narrowing" amendments

because the scope of the claims has not been reduced in these regards. No limitations have been added in these regards and none are intended.

Withdrawal of the rejection is in order and is respectfully requested.

Claims 3-6, 8, 10, 12, 13 and 15 have been rejected under Section 103 as obvious from JP-2-235320, identified in the Office Action as "Masanori". For the record, the Japanese document is in the name of Masanori Endo, "Masanori" being the given name and "Endo" being the family name. Applicants will refer to this document as "Endo". The rejection is respectfully traversed.

Endo discloses adding propylene glycol to activated carbon fiber and mixing these materials using a spiral mixer, thereby obtaining a mixture. PTFE is added to the mixture which is then kneaded into a viscous mixture such as rubber. The viscous mixture is rolled into a sheet preform with a thickness of 1 mm. The preform is further rolled into a thin sheet with a thickness of 0.25 mm.

In Endo, the mixture of propylene glycol and activated carbon fiber is kneaded directly after PTFE is added to the mixture. As a result, the PTFE is not sufficiently mixed with the mixture of propylene glycol and activated carbon fiber such that the PTFE is not dispersed uniformly in

the mixture. Consequently, the mixture includes parts in which any action of the PTFE as a binder is insufficient, and accordingly cracks tend to occur when the mixture is rolled into a sheet form.

In the claimed invention, however, the mixing step is divided into two sub-steps. In the first sub-step, carbonaceous powder and a conductive assistant are mixed into a primary mixture in the first sub-step. The binder is mixed with the primary mixture into a secondary mixture.

Subsequently, the secondary mixture is kneaded so that the material mixture becomes viscous and then massive.

According to the claimed invention, the binder is a mixed with a primary mixture so as to disperse uniformly in the secondary mixing. Accordingly, since the entire secondary mixture is processed into a mass with a uniform viscosity, the occurrence of cracks can be prevented in the subsequent rolling step. Of course the primary mixture is mixed with the binder to such a degree that the binder does not render the primary mixture viscous.

Thus, the mixing step is divided into two sub-steps in the claimed invention. Carbonaceous powder and a conductive assistant are mixed into a primary mixture in the first sub-step. A binder is uniformly mixed with the primary mixture in the second sub-step. Endo fails to disclose or

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suggest division of the mixing of the two sub-steps.

Therefore, claim 3 and the claims which depend therefrom are believed to be allowable over Endo.

Withdrawal of the rejection is in order and is respectfully requested.

Claims 3-6, 8, 10, 12, 13 and 15 have been provisionally rejected on the basis of obviousness-type double patenting over claims 1 and 2 of co-pending application 10/724,360. This rejection is respectfully traversed.

First, as this rejection is only provisional, it need not be addressed at the present time. Applicants note that claims 1 and 2 of the co-pending application have not been allowed, and there is no certainty at the present time of the allowance of such claims in the future. Even if double patenting really existed, which applicants respectfully deny for the reasons pointed out below, any double patenting rejection at the present time would be premature.

Applicants respectfully note that the PTO is being highly inconsistent, and applicants accordingly strongly object. On the one hand, different species in the present application are deemed patentably distinct from one another, "patentably distinct" meaning that the species are deemed by the PTO to be prima facie non-obvious from one another. On the other hand, the PTO inconsistently takes a position where

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the present species claims are deemed prima facie non-obvious from claims in an entirely different application. With respect, applicants maintain that the PTO is applying a double standard, namely a strict "patentably distinct" standard for election of species, and a very non-strict standard for alleged double patenting.

The presently claimed invention is directed to the manufacturing a sheet of polarizable electrode for an electric double layer capacitor through the steps of mixing including two sub-steps, kneading, forming, and rolling.

On the other hand, in the invention claimed in claim 1 of the co-pending application No. 10/724,360, a long sheet intermediate is previously made from a material containing a carbonaceous powder, a conductive assistant and a binder. Thereafter, the sheet intermediate is passed between a pair of rolling rollers to be wound up by a winding section while being drawn out of a drawing section, whereby a sheet electrode with a predetermined thickness for an electric double layer capacitor is made. Claim 1 of the co-pending application is directed to a roller rolling. The claims of the co-pending application fail to disclose or suggest division of the mixing step into two sub-steps.

The provisional double patenting rejection should be withdrawn, and such is respectfully requested.

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Applicants believe that all issues raised in the Official Action have been addressed above in a manner which should lead to patentability of applicants' claims.

Accordingly, applicants respectfully request favorable reconsideration and allowance.

Respectfully submitted,

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